

# INQUIRY LEARNING: Definition and Discussion

*Inquiry learning is an approach that provides learners opportunities to actively develop skills that enable them to locate, gather, analyse, critique and apply information in a wide range of contexts. as they develop understanding.*

At least that is how I currently understand and define the concept. I have found that trying to define inquiry learning is like trying to grab a bar of soap in the bath. Every time you think you have grasped its essence it slides away as another piece of literature or concept challenges your carefully built understanding.

In my opinion, when inquiry learning is implemented well in a school the following criteria are being met, or there is demonstrable progress towards these criteria being met.

- Students are at some stage of progression along a continuum that starts at teacher directed units, includes negotiated units through to student driven learning.
- Students are actively supported and scaffolded by teachers in the acquisition of relevant skills.
- Students are engaged in learning.
- Students deepen or gain understanding of core concepts relevant to the context.
- Students work collaboratively in small groups.
- Students use and apply the information then share their solutions, decisions, thinking and outcomes in a celebration of understanding. They are not involved in a process of shifting and sharing information.
- Students will access a range of information sources.
- Students predicate their work on prior knowledge.
- Students will be actively engaged in asking and following up on questions as a central skill.
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These criteria raise a number of theoretical and practical issues for schools:

**Goal:** To implement inquiry learning effectively a school first needs to have a clear goal and reason behind taking this step and needs to constantly measure every aspect of the implementation in terms of achieving that goal. For the sake of this discussion I will make the assumption that a central goal for implementing inquiry learning is to move students towards independence as learners.

**Progression:** It is unrealistic to expect students to be able to instantly develop high level learning tasks that are supported by resources, scaffold specific skills, and ensure usage and application of information. Experience has shown that the move towards independence as a learner is a 6 to 13 year journey. It is logical that the start point is highly scaffolded, teacher directed activities where foundational skills are developed. Students can then draw on their experiences and learning to move to negotiated inquiry activities. Once skills have matured and developed further then students can move towards increasing independence in developing their own learning tasks.

**Scaffolding:** Inquiry learning, if it is targeted at developing independence will not be a sink or swim experience for learners. Early experiences will be highly scaffolded, allowing students to experience success and develop skills. To provide adequate scaffolding places large demands on teachers in terms of that preparation and planning as well as a high

level of engagement and interaction with students as they move through the learning experience.

**Skill teaching:** Learning is a complex process and being independent as a learner requires the development of a large number of skills. These skills will not be acquired by absorption. Skills need to be deliberately taught by teachers and practiced by students in real and engaging contexts over time.

**Engagement:** Student engagement in learning is a central goal, however this requires teachers to develop learning experiences that are highly relevant, challenging and practical for the students. Teachers also need to be highly engaged and enthusiastic themselves because bored and disinterested teachers is a factor that will impact negatively on student engagement. This places a very real challenge on teachers to plan and develop relevant activities that they can engage in enthusiastically themselves.

**Key Understandings:** Schools have curriculum requirements (either external or internal) and these will usually include the development of conceptual understanding. It is important for schools to clarify the key understandings they hope to facilitate in their students and then use as the base for the inquiry learning activities.

**Grouping:** The most powerful learning happens when students can discuss, argue, compare ideas and build understanding. It seems appropriate therefore that inquiry learning is more effective when students are actively encouraged to do this. Many years of working with schools on inquiry learning has leads me to suggest that students work in groups of three. There is a special dynamic that seems to happen in groups of three that doesn't occur so easily in larger groups. Groups of three are also very easy for teachers to monitor. Ensure that each group includes one of the best readers to enable the group to access as high a text level as possible.

**Applying and using information:** Understanding does not come through the shifting and sharing of information. Real understanding comes through using and applying. For instance I could read a large number of books and articles on calligraphy, but it is the act of applying that information and actually doing some calligraphy that will allow me to really understand the concepts and information I have found. In my opinion good inquiry learning will always involve students in some form of practical application of the information they find. When examining inquiry learning activities in schools I always have two base questions I seek the answers to. Firstly I will analyse the task to see what information the students are expected to find. Secondly I will look to see what they are being asked to do with that information. Sadly in many cases I find that the students are being asked to present the found information in some form. This, in my opinion, is not good inquiry learning!

**Information sources:** Inquiry learning experiences should foster students into working with a wide range of information sources. These sources should include printed text, digital sources, images, data and people. At the junior part of the school inquiry learning is possible and effective as long as text is not a major information source. At this level reading skills are limited so major information sources should be people and images.

**Prior knowledge:** Gaining understanding is a process of linking new information to prior knowledge. This means that in any inquiry learning process there should be a time for clarifying prior knowledge. We also need to recognise that most of us will also think we know things that we later find are incorrect, false, distorted or naive in some way. the

implication of this is that when we define our prior knowledge it may be of value to carry out some small research activities to validate the stuff we think we know.

**Questioning:** Questioning is a major central skill to learning. It could be argued that it is in fact our prime intellectual skill. Questioning is a skill set that needs to be developed, to do so teachers need to have a clear understanding of questioning, questioning skills and how to facilitate students' questioning skills. (Further information on this is available on my Questioning Wiki - <http://question-skills.wikispaces.com/> )

**Teacher Development:** All the aspects touched on above indicate that good inquiry learning will not happen by accident, it is predicated on good professional development for teachers. The main ingredient in successful inquiry learning is the teacher, and it is an unfair assumption to expect teachers to successfully implement inquiry learning without adequate support and assistance. It is unfair both on the teacher and the students.

**School Infrastructure:** For inquiry learning to work properly there are many aspects of school infrastructure that need to be examined and modified. This ranges from library development to computer access to resource storage and a myriad of other issues, especially if we are serious about this being a process that moves students towards independence as learners.

### **Summary**

Inquiry learning is a complex and powerful methodology when it is done well. There are many challenges for schools to face up to and I believe that any casual implementation of inquiry learning is either doomed to failure through teacher and student frustration or will be a shallow version of what is possible and will eventually be abandoned because it is not meeting the goals.